## **SPECIAL INSPECTIONS:**

## IMPLEMENTATION IN FAIRFAX COUNTY

# 2000 Edition

Effective: October 1, 2003

Based on Virginia Uniform Statewide Building Code (2000) Edition, 13 VAC 5-62-10 et seq., effective October 1, 2003



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The staff of Land Development Services, Department of Public Works and Environmental Services, expresses our appreciation for the valuable assistance of all of the individuals and organizations who contributed to the creation of **Special Inspections: Implementation in Fairfax County - 2000 Edition**.

Dan K. Williams, P.E., C.B.O. Supervisor, Critical Structures Section, Commercial Inspections Division October 1, 2003

#### PREFACE TO THE SIFC-2000

The new *Virginia Uniform Statewide Building Code* edition, effective October 1, 2003, (**VUSBC(2000)**, or **VUSBC**), <u>incorporates and amends</u> the International Code Council, Inc. (ICC) *2000 International Building Code*, including portions of the *2001* and *2002 Supplements* (**IBC-2000**, or **IBC**).

Special Inspections: Implementation in Fairfax County - 2000 Edition, effective October 1, 2003, (SIFC-2000), implements the Fairfax County Special Inspections Program procedures for special inspections that are required by the VUSBC(2000) and IBC-2000. This SIFC-2000 is intended to be useable in offices and on the job site by containing the pertinent information needed for successful application of the special inspections program, but it is not a replacement for the governing codes, nor is it a library of all referenced standards.

The procedures of the special inspections program have "SIFC-mm.nn" section numbers. The VUSBC and IBC building code sections that are included in each chapter have a different font, with "VUSBC-mm.nn" and "IBC-mm.nn" section numbers, respectively, which should help in reading and applying the program and the building code. Individuals such as the Owner are shown in bold type to emphasize their roles and responsibilities. Examples:

"SIFC-301.1 Required by VUSBC and IBC. The VUSBC requires special inspections for ..." (SIFC-2000 language)

"VUSBC-1704.1 General. Where application is made for construction as described in this section, the **Owner** or the **RDP** in responsible charge ..." (VUSBC language)

Several additional changes are summarized below.

Chapter 1, The Fairfax County Special Inspections Program. The description of "special inspections and materials testing" has been changed from "...ensure adequacy..." to "...substantiate adequacy...". The inspection and testing agency shall meet ASTM E 329 requirements. The Special Inspections Engineer of Record is responsible for the inspection and testing agency's work, whether directly supervising it or not. Both parties are subject to County approval, and the FCCSS role is to confirm their work. The appropriate registered design professionals of record shall review and approve the final report of special inspections before its submission for FCCSS review and approval.

<u>Chapter 2, Definitions and Abbreviations</u>. Revises several definitions and includes definitions from SIFC-2000, IBC and VUSBC. Includes contact information for standards promulgating organizations (addresses, telephone numbers and web sites).

"Completion letter" and "Final report of special inspections". To clarify the scope and timing of special inspections, these definitions now include the phrases "...special inspections as identified in the statement of special inspections..." and "...materials or phases of construction have been inspected prior to concealment...".

"Inspection and testing agency". To be approved, an inspection and testing agency must be accredited and meet the requirements of ASTM E 329.

"Special inspection". A new sentence, "...In this context, 'ensure' means 'substantiate'...", clarifies the intent of both the SIFC-2000 and IBC definitions.

<u>Chapter 3, Special Inspections Classifications</u>. Includes VUSBC-1704.1 *General*, IBC-1704.2 *Inspection of fabricators*, and Code of Virginia § 54.1-400 et seq. Requirements for professional design of buildings. Seismic classifications are revised. Cast-in-place concrete includes a sentence on "stable" ground support. New classifications are added for sprayed fire-resistant material, smoke control, and mechanical, electrical and plumbing components, and the Statement of Special Inspections form has the new classifications.

<u>Chapter 5, Special Inspections and Testing Services</u>. New language specifies the approval process for changes in construction team. Design revisions with associated document revisions, such as field change orders, shall be in writing and approved. The distribution of special inspection reports is clarified. The SIER has the duty to report observed code violations or job site safety violations, but is not liable for other parties. Each laboratory must be accredited; added criteria for on-site laboratory approval.

<u>Chapter 6, Structural Steel</u>. IBC-1704.3 *Steel construction* is included. "Spray-on-fireproofing" has moved to new Chapter 14.

<u>Chapter 7, Cast-in-Place Concrete</u>. IBC-1704.4 *Concrete construction* and IBC-Table 1704.4, <u>as amended by VUSBC(2000)</u>, are included. Special inspection of concrete formwork, shoring and reshoring is still (and will remain) within special inspections. Includes IBC-1906.6 for acceptance of concrete. Cold-weather concreting has been revised for clarity on storage locations of field cylinders, and frequency of temperature readings.

Chapter 8, Precast Concrete. Explicitly refers to IBC.

<u>Chapter 9, Wood</u>. Revised to include IBC-1704.6 *Wood construction*, with SIFC-2000 requirements for fabrication and erection documents, inspection of wood fabricators and inspection of seismic connections.

<u>Chapter 10, Masonry</u>. Now includes VOSHA requirements for construction bracing of masonry walls. Special inspections are classified by kind of facility ("essential" vs. "non-essential") and type of structural design, with required inspections listed in new IBC tables. SIFC-2000 requirements for cold-weather and hot-weather construction have been revised to include IBC Chapter 21 requirements.

<u>Chapter 11, Soils and Foundations</u>. Includes IBC-1704.7, IBC-1704.8 and IBC-1704.9, and specifically refers to sections in IBC Chapter 18.

<u>Chapter 13, Exterior Insulation and Finish Systems</u>. The IBC scope of EIFS systems which require special inspections is different from that in the previous code.

<u>Chapter 14, Sprayed fire-resistant materials, Chapter 15, Smoke control systems, and Chapter 16, Mechanical, electrical and plumbing components</u>. New chapters, including IBC requirements for special inspection of these items.

<u>Chapter 17, Safeguards During Construction</u>. Relocated and retitled, combining two chapters of previous edition. Protection of the public requires safe storage of construction materials, exits from occupied buildings to be kept usable, and includes fencing, barriers and covered walkways. Tower cranes, personnel and material hoists, and construction elevators are included. Fire protection (fire extinguishers, standpipes, sprinklers, fire watch timing) is revised. Includes completion requirements for new buildings and tenant areas.

Appendix A, VUSBC(2000) Excerpts. New appendix: Amendments to IBC Chapter 17.

Appendix B, IBC-2000 Excerpts. New appendix: IBC Chapter 17.

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